

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/011974

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/11 G06F19/00 C12N5/10 A01K67/027 C12N15/67  
C12N15/79

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N G06F A01K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, BIOSIS, EMBL, Sequence Search

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE EMBL [Online] 4 January 2002 (2002-01-04), "Human DNA sequence from clone RP4-743D20 on chromosome 1 Contains a novel gene and a CpG island." XP002322943 retrieved from EBI accession no. EM_HUM:AL663105 Database accession no. AL663105 the whole document</p> <p>----- -/--</p>	1-4,7-9, 35-41

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

\* Special categories of cited documents .

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

1 April 2005

Date of mailing of the international search report

13-07-2005

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>ZAHN-ZABAL M ET AL: "Development of stable cell lines for production or regulated expression using matrix attachment regions"</p> <p>JOURNAL OF BIOTECHNOLOGY, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 87, no. 1, 27 April 2001 (2001-04-27), pages 29-42, XP004231294</p> <p>ISSN: 0168-1656</p> <p>the whole document</p>	1-4,7-9, 12-14, 35-61
X	<p>WO 02/079447 A (AVIGENICS, INC; RAPP, JEFFREY, C) 10 October 2002 (2002-10-10) cited in the application</p> <p>the whole document</p>	1-4,7-9, 12-14, 35-61
X	<p>KWAKS TED H J ET AL: "Identification of anti-repressor elements that confer high and stable protein production in mammalian cells"</p> <p>NATURE BIOTECHNOLOGY, NATURE PUBLISHING, US, vol. 21, no. 5, 20 May 2003 (2003-05-20), pages 553-558, XP002246849</p> <p>ISSN: 1087-0156</p> <p>the whole document</p>	1-4,7-9, 12-14, 35-61
X	<p>WO 00/32800 A (DOW AGROSCIENCES LLC) 8 June 2000 (2000-06-08)</p> <p>the whole document</p>	12-14
A	<p>FRISCH M ET AL: "In silico prediction of scaffold/matrix attachment regions in large genomic sequences"</p> <p>GENOME RESEARCH, COLD SPRING HARBOR LABORATORY PRESS, US, vol. 12, no. 2, February 2002 (2002-02), pages 349-354, XP002257587</p> <p>ISSN: 1088-9051</p> <p>the whole document</p>	1-4,7-9, 12-14, 35-61
A	<p>SINGH G B ET AL: "Mathematical model to predict regions of chromatin attachment to the nuclear matrix"</p> <p>NUCLEIC ACIDS RESEARCH, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 25, no. 7, 1997, pages 1419-1425, XP002273524</p> <p>ISSN: 0305-1048</p> <p>cited in the application</p> <p>the whole document</p>	1-4,7-9, 12-14, 35-61

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 PCT/EP2004/011974

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	LEVITSKY VICTOR G ET AL: "Nucleosomal DNA property database" BIOINFORMATICS (OXFORD), vol. 15, no. 7-8, July 1999 (1999-07), pages 582-592, XP002322940 ISSN: 1367-4803 cited in the application the whole document -----	1-4,7-9, 12-14, 35-61
A	ROLLINI PIERRE ET AL: "Identification and characterization of nuclear matrix-attachment regions in the human serpin gene cluster at 14q32.1" NUCLEIC ACIDS RESEARCH, vol. 27, no. 19, 1 October 1999 (1999-10-01), pages 3779-3791, XP002322995 ISSN: 0305-1048 the whole document -----	1-4,7-9, 12-14, 35-61
A	BONNEFOY ELIETTE ET AL: "Specific binding of high-mobility-group I (HMGI) protein and histone H1 to the upstream AT-rich region of the murine beta interferon promoter: HMGI protein acts as a potential antirepressor of the promoter" MOLECULAR AND CELLULAR BIOLOGY, vol. 19, no. 4, April 1999 (1999-04), pages 2803-2816, XP002322941 ISSN: 0270-7306 abstract -----	2,3
A	COX GEORGE W ET AL: "Molecular cloning and characterization of a novel mouse macrophage gene that encodes a nuclear protein comprising polyglutamine repeats and interspersing histidines" JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 271, no. 41, 1996, pages 25515-25523, XP002322942 ISSN: 0021-9258 abstract -----	8

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/011974

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 02079447	A	10-10-2002	US	2002199214 A1	26-12-2002
			EP	1478751 A2	24-11-2004
			WO	02079447 A2	10-10-2002
			US	2003140363 A1	24-07-2003
			EP	1438401 A2	21-07-2004
			WO	03025146 A2	27-03-2003
			US	2003126629 A1	03-07-2003
-----					
WO 0032800	A	08-06-2000	AT	279524 T	15-10-2004
			AU	1833100 A	19-06-2000
			DE	69921180 D1	18-11-2004
			DE	69921180 T2	17-02-2005
			EP	1135512 A1	26-09-2001
			ES	2232190 T3	16-05-2005
			JP	2002531097 T	24-09-2002
			WO	0032800 A1	08-06-2000
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